

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of driving a plasma display panel, the panel comprising:

a plurality of mutually parallel first display electrodes including first display electrodes and second display electrodes, the second display electrodes being parallel to and alternating with the first display electrodes,

and a plurality of ~~second~~ mutually parallel data electrodes separated from and perpendicular to the first display electrodes,

wherein the intersection points of neighboring pairs of the first electrode pairs and the second electrode pairs forming an unit the display electrodes and the data electrodes define a plurality of display cells,

~~said the method comprising the steps of reversing the potentials between the electrodes at the time of write discharge carried out between the odd numbered said first electrodes and even-numbered said first electrodes, and said second electrodes, to each other;~~

(a) sequentially applying a write discharge pulse of a first potential difference between the first display electrodes and the data electrodes, to the first display electrodes; and

(b) sequentially applying a write discharge pulse of a second potential difference, having a polarity opposite that of the first potential difference, between the second display electrodes and the data electrodes, to the second display electrodes.

2. (currently amended): The method as set forth in claim 1, wherein ~~at said odd-numbered (even-numbered) first electrodes, a scan pulse of negative polarity from the first base potential is applied sequentially, and then corresponding to said scan pulse of negative polarity, at said second electrodes, a data pulse of positive polarity from the second base potential is applied, and at said even-numbered (odd-numbered) first electrodes, a scan pulse of positive polarity from the third base potential is applied sequentially, and then corresponding to said scan pulse of positive polarity, at said second electrodes, a data pulse of negative polarity from the fourth base potential is applied to carry out the write discharges~~

step (a) includes sequentially applying a negative scan pulse having a negative polarity with respect to a first base potential, to the first display electrodes, while applying a positive data pulse having a positive polarity with respect to a second base potential, to the data electrodes;
and

step (b) includes sequentially applying a positive scan pulse having a positive polarity with respect to a third base potential, to the second display electrodes, while applying a negative data pulse having a negative polarity with respect to a fourth base potential, to the data electrodes.

3. (currently amended): The method as set forth in claim 2, wherein: ~~at least one of~~
the amplitude of ~~said~~ the negative scan pulse ~~of negative polarity~~ and the amplitude of
~~said~~ the positive scan pulse ~~of positive polarity~~, and, ~~the amplitude of said data pulse of positive~~
~~polarity and the amplitude of said data pulse of negative polarity~~, are different; or

the amplitude of the negative data pulse and the amplitude of the positive data pulse are
different; or

the amplitude of the negative scan pulse and the amplitude of the positive scan pulse are
different and the amplitude of the negative data pulse and the amplitude of the positive data pulse
are different.

4. (currently amended): The method as set forth in claim 2, ~~wherein~~ wherein:
the third base potential ~~of said scan pulse of positive polarity~~ is set at a higher potential
than the first base potential ~~of said scan pulse of negative polarity~~, and ~~said~~:
the second base potential of said data pulse of positive polarity and the reach potential of
said negative data pulse of negative polarity are made to be the same are of equal potential; and
~~said~~

the fourth base potential of said data pulse of negative polarity and the reach potential of
said positive data pulse of positive polarity are made to be the same are of equal potential.

5. (currently amended): The method as set forth in claim 2, ~~wherein~~ wherein:
~~said the first base potential of said scan pulse of negative polarity and said the third base potential of said scan pulse of positive polarity are made to be at the same potential~~ equal; and,
~~said the second base potential of said data pulse of positive polarity and said the fourth base potential of said data pulse of negative polarity are made to be at the same potential~~ equal.

6. (currently amended): The method as set forth in claim 2, ~~wherein among the two first electrodes neighboring said first electrode onto which a scan pulse is applied, onto the first electrode that constitutes the display cells on the side where write discharge has not occurred, a write cancel pulse is applied at the time of write discharge~~ further comprising the steps of:

when the negative scan pulse is applied to the first display electrode, applying a write cancel pulse to one of two second display electrodes next to the first display electrode to which the negative scan pulse is applied; and

when the positive scan pulse is applied to a second display electrode, applying a write cancel pulse to one of the two display electrodes next to the second display electrode to which the positive scan pulse is applied.

7. (currently amended): The method as set forth in claim 1, ~~wherein~~ further comprising,
~~after the finish of all of the write discharge in all said display cells~~ pulses are applied, carrying out, sustain discharges are carried out between said first all of the first display electrodes and neighboring all said display cells second display electrodes.

8. (currently amended): The method as set forth in claim 1, ~~wherein further comprising,~~
before ~~said any~~ write discharge pulses are applied, ~~a discharge period, in which the~~ resetting
electrical charge conditions in all ~~said display cells are reset, is set~~

9. (currently amended): The method as set forth in claim 8, wherein ~~said discharge~~
~~period, in which electrical charge conditions are reset, is a sustain elimination discharge that~~
~~resets the~~ resetting of the electrical charge conditions includes at least one of a sustain
elimination discharge resetting only the those display cells that ~~has had~~ sustain discharged in ~~the~~
a previous sustain discharge period, ~~or and~~ a priming discharge ~~that causes causing~~ discharges in
all display cells, ~~or a combination of sustain elimination discharge and priming discharge.~~

10. (currently amended): The method as set forth in claim 9, wherein:
~~said the~~ priming discharges are made to occur discharge occurs simultaneously in all
display cells; and
~~the rise, or, time of rise,~~ either or both of rising and falling times of the pulse that causes
the ~~occurrence of~~ priming discharges is below 10 V/ μ s.

11. (currently amended): The method as set forth in claim 1, wherein ~~said second the~~
data electrodes ~~are set in form~~ an island ~~form in every each~~ display cell, and said island-formed
parts are positioned opposite the ~~first display~~ electrodes that carry out the write discharges.

12. (new): A apparatus that drives a plasma display panel, comprising:
first and second display electrodes which are alternately disposed with respect to each other;
data electrodes formed perpendicular to the first and second display electrodes; and
a control circuit that applies a first write discharge pulse having a first potential difference to the first display electrodes, wherein the first potential difference is a potential difference between the first display electrodes and the data electrodes,
wherein the control circuit applies a second write discharge pulse having a second potential difference to the second display electrodes, wherein the second potential difference is a potential difference between the second display electrodes and the data electrodes and has a polarity that is opposite to a polarity of the first potential difference.

13. (new): The apparatus as set forth in claim 12, wherein
the control circuit applies the first write discharge pulse by applying a negative scan pulse having a negative polarity with respect to a first base potential, to the first display electrodes, while applying a positive data pulse having a positive polarity with respect to a second base potential, to the data electrodes; and
the control circuit applies the second write discharge pulse by applying a positive scan pulse having a positive polarity with respect to a third base potential, to the second display

electrodes, which applying a negative data pulse having a negative polarity with respect to a fourth base potential, to the data electrodes.

14. (new): The apparatus as set forth in claim 13, wherein the amplitude of the negative scan pulse and the amplitude of the positive scan pulse are different.

15. (new): The apparatus as set forth in claim 13, wherein the amplitude of the negative data pulse and the amplitude of the positive data pulse are different.

16. (new): The apparatus as set forth in claim 13,
wherein the amplitude of the negative scan pulse and the amplitude of the positive scan pulse are different, and

wherein the amplitude of the negative data pulse and the amplitude of the positive data pulse are different.

17. (new): The apparatus as set forth in claim 13,
wherein the third base potential is higher than the first base potential,
wherein the second base potential and the negative data pulse are of equal potential, and
wherein the fourth base potential and the positive data pulse are of equal potential.

18. (new): The apparatus as set forth in claim 13,

wherein the first base potential and the third base potential are equal, and

wherein the second base potential and the fourth base potential are equal.

19. (new): The apparatus as set forth in claim 13, wherein

when the control circuit applies the negative scan pulse to a first display electrode, the control circuit applies a write cancel pulse to one of two second display electrodes next to the first display electrode to which the negative scan pulse is applied; and

when the control circuit applies the positive scan pulse to a second display electrode, the control circuit applies a write cancel pulse to one of the two first display electrodes next to the second display electrode to which the positive scan pulse is applied.

20. (new): The apparatus as set forth in claim 12, wherein, after all of the write discharge pulses are applied, the control circuit carries out sustain discharges between all of the first display electrodes and neighboring second display electrodes.

21. (new): The apparatus as set forth in claim 12, wherein, before any write discharge pulses are applied, the control circuit establishes resetting electrical charge conditions in all display cells respectively defined by intersection points of the display electrodes and the data electrodes.

22. (new): The apparatus as set forth in claim 21, wherein the resetting of the electrical charge conditions comprises sustain elimination discharge resetting only those display cells that had sustain discharged in a previous sustain discharge period.

23. (new): The apparatus as set forth in claim 21, wherein the resetting of the electrical charge conditions comprises performing a priming discharge causing discharges in all display cells.

24. (new): The apparatus as set forth in claim 23,
wherein the priming discharge occurs simultaneously in all display cells; and
wherein a rate of voltage change of a pulse that causes the priming discharge is below 10 V/ μ s.

25. (new): The apparatus as set forth in claim 12,
wherein the data electrodes form an island in each display cell, and
wherein said island-formed parts are positioned opposite the display electrodes that carry out the write discharges.